

**FIELD INSPECTION REPORT****STRUCTURE NO. 72-73**  
**INSPECTION DATE: 12/14/05**

<b>CONDITION RATING CODES</b>			
N	NOT APPLICABLE	2	CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken.
9	EXCELLENT CONDITION		
8	VERY GOOD CONDITION – no problems noted.		
7	GOOD CONDITION – some minor problems.		
6	SATISFACTORY CONDITION – structural elements show some minor deterioration.		
5	FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour.	1	“IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service.
4	POOR CONDITION – advanced section loss, deterioration, spalling, or scour.		
3	SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.	0	FAILED CONDITION – out of service; beyond corrective action.
<b>CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS</b>			
G = GOOD (CODES 7 – 9)    F = FAIR (CODES 5 – 6)    P = POOR (CODES 0 – 4)			

<b>59. TUNNEL</b>	<b>6</b>
1. LINING	G
2. PORTALS	G
3. FLOOR	F
4. DRAINS & DRAINAGE	G
5. VENTILATION	G
6. OTHER	N
7. OTHER	N
8. OTHER	N

<b>401. ACCESS ROOM</b>	<b>N</b>
1. WALL	N
2. CEILING	N
3. FLOOR	N
4. STAIRWAY	N
5. OTHER	N
6. OTHER	N
7. OTHER	N

<b>402. UTILITIES</b>	<b>4</b>
1. STEAM	P
2. WATER	P
3. ELECTRICAL	F
4. GAS	N
5. FIBER OPTIC	N
6. OTHER (telephone)	P
7. OTHER	N
8. OTHER	N

59.1	Minor vertical cracks on walls and transverse cracks on ceiling.
59.3	Undermined area of floor near north end.
402.1,2	Moderate rust on pipes.
402.3	Total section loss on conduit at kink in tunnel (about 140 ft from south end). Minor corrosion along conduits. Old conduits with exposed open junction boxes exist in wall.
402.6	Phone wires are cut.

**PHOTOS**



Photo 1: North portal, south side



Photo 2: South portal



Photo 3: Sealed access doorway at stairway into Building 72



Photo 4: Vertical Cracking on walls and transverse cracking on ceiling





Photo 5: Corrosion on utility pipes



Photo 6: Deteriorated conduit with total section loss; Note exposed wires



Photo 7: Open junction boxes in wall for old electrical conduits



Photo 8: Corrosion on unwrapped portion of pipe

# **TUNNEL INSPECTION REPORT**

**ST. ELIZABETHS HOSPITAL – WEST CAMPUS  
WASHINGTON, D.C.  
TUNNEL BETWEEN BUILDINGS 73 & 74**



NORTH PORTAL



SOUTH PORTAL

Report Prepared by:  
**Burgess & Niple, Inc.**  
4160 Pleasant Valley Road  
Chantilly, VA 20151

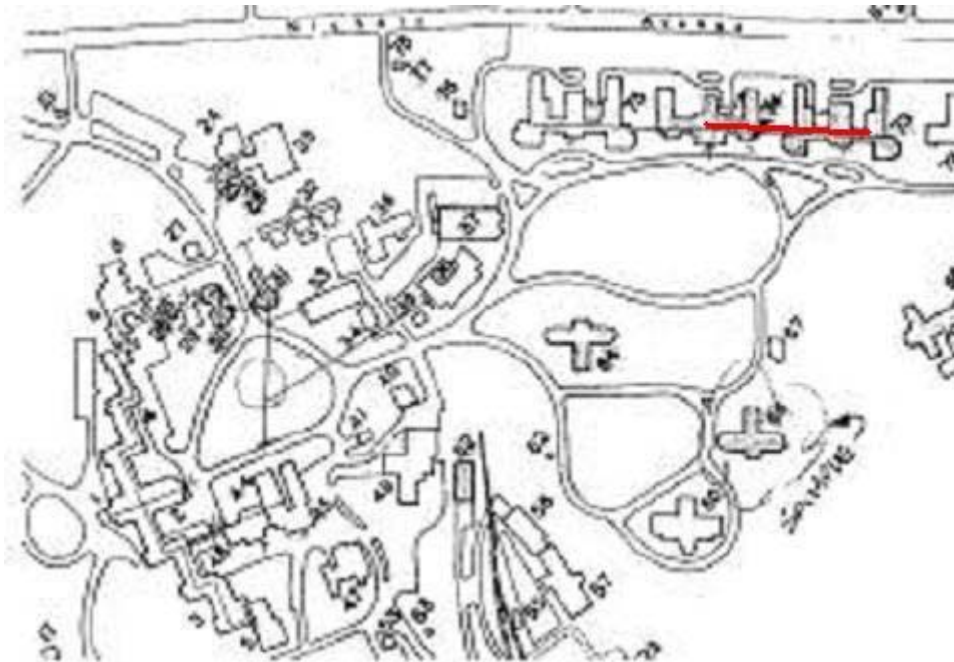
Inspection Date: 12/14/05

**TUNNEL IDENTIFICATION AND DESCRIPTION**

Lining Material	Brick
Total Length	315.0 FT
Springline Width	8.2 FT
Begin Building	73
End Building	74

Tunnel Height	9.3 FT
Year Constructed	1900 (est.)
Year Reconstructed	
Entry Through Building	74

Tunnel connects the basement level of Building 73, C Building to the basement level of Building 74, The Administration Building.

**LOCATION MAP**

**INSPECTION TEAM:** T. Suthers, J. Wolfe (Burgess & Niple, Inc.)

**EXECUTIVE SUMMARY**

This tunnel is 315 feet long by 8.2 feet wide and runs between buildings 73 and 74. Building 73 is at the south end of the tunnel and Building 74 is at the north end. The tunnel lining is composed of brick and concrete and is in good condition. Utilities within the tunnel at the time of inspection include water, steam, electric, and telephone; none of which were functioning. Minor problems at this time include corrosion of the utility pipes and conduits.

**RECOMMENDATIONS****Critical Repairs:**

None.

**Priority Repairs:**

None.

**Routine Repairs:**

1. Replace lighting conduits and wiring, 315 LF.
2. Replace electric lines, 315 LF.



**FIELD INSPECTION REPORT****STRUCTURE NO. 73-74**  
**INSPECTION DATE: 12/14/05**

<b>CONDITION RATING CODES</b>			
N	NOT APPLICABLE	2	CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken.
9	EXCELLENT CONDITION		
8	VERY GOOD CONDITION – no problems noted.		
7	GOOD CONDITION – some minor problems.		
6	SATISFACTORY CONDITION – structural elements show some minor deterioration.		
5	FAIR CONDITION – all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour.	1	“IMMINENT” FAILURE CONDITION – major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Structure is closed to traffic but corrective action may return structure to light service.
4	POOR CONDITION – advanced section loss, deterioration, spalling, or scour.		
3	SERIOUS CONDITION – loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.	0	FAILED CONDITION – out of service; beyond corrective action.
<b>CONDITION RATING CODE EQUIVALENTS FOR SUB-ELEMENTS</b>			
G = GOOD (CODES 7 – 9)    F = FAIR (CODES 5 – 6)    P = POOR (CODES 0 – 4)			

<b>59. TUNNEL</b>	<b>7</b>
1. LINING	G
2. PORTALS	G
3. FLOOR	G
4. DRAINS & DRAINAGE	G
5. VENTILATION	G
6. OTHER	N
7. OTHER	N
8. OTHER	N

<b>401. ACCESS ROOM</b>	<b>N</b>
1. WALL	N
2. CEILING	N
3. FLOOR	N
4. STAIRWAY	N
5. OTHER	N
6. OTHER	N
7. OTHER	N

<b>402. UTILITIES</b>	<b>4</b>
1. STEAM	P
2. WATER	P
3. ELECTRICAL	P
4. GAS	N
5. FIBER OPTIC	N
6. TELEPHONE	G
7. OTHER	N
8. OTHER	N

59.1	Several damp areas on brick lining.
402.1,2,3	Moderate to heavy corrosion on steam pipes, water pipes, and electrical conduits. Several light fixtures are damaged.

**PHOTOS**



Photo 1: North portal



Photo 2: South portal



Photo 3: General view of brick lining, looking south toward Building 73



Photo 4: Looking north toward Building 74; Note damp areas along brick lining



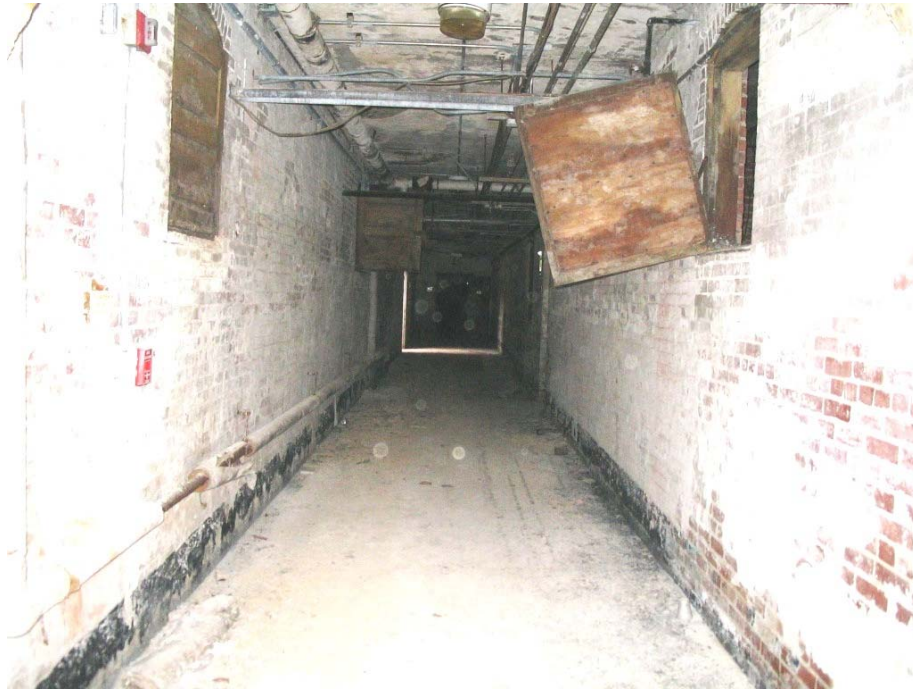


Photo 5: Looking south from south portal; Note hanging door

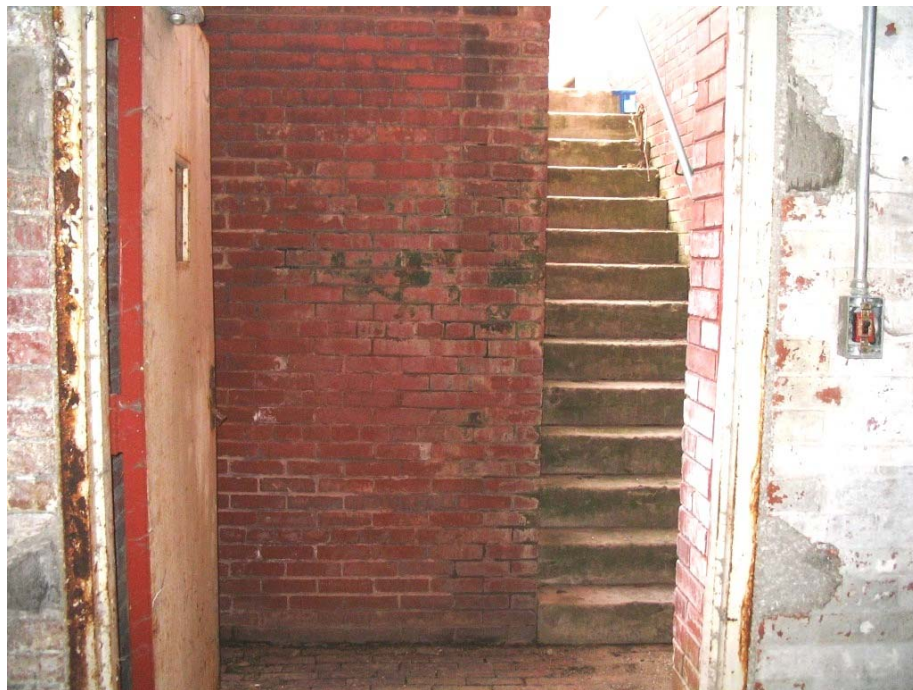


Photo 6: General view of stairway at Building 73





Photo 7: General view of stairway at Building 74



Photo 8: General view of utility pipes, looking north



Photo 9: Corrosion on piping at south portal



Photo 10: Damaged light fixture; Note corrosion on conduit

# TUNNEL INSPECTION REPORT

ST. ELIZABETHS HOSPITAL – WEST CAMPUS  
WASHINGTON, D.C.  
TUNNEL BETWEEN BUILDINGS 74 & 75



NORTH PORTAL



SOUTH PORTAL

Report Prepared by:  
**Burgess & Niple, Inc.**  
4160 Pleasant Valley Road  
Chantilly, VA 20151

Inspection Date: 12/14/05



**TUNNEL IDENTIFICATION AND DESCRIPTION**

Lining Material	Brick
Total Length	300 FT
Springline Width	8.2 FT
Begin Building	74
End Building	75

Tunnel Height	9.2 FT
Year Constructed	1900 (est.)
Year Reconstructed	
Entry Through Building	74

Tunnel connects the basement level of Building 74, The Administration Building to the basement level of Building 75, B Building.

**LOCATION MAP**

**INSPECTION TEAM:** T. Suthers, J. Wolfe (Burgess & Niple, Inc.)



**EXECUTIVE SUMMARY**

This tunnel is 300 feet long by 8.2 feet wide and runs between buildings 74 and 75. Building 74 is at the south end of the tunnel and Building 75 is at the north end. The tunnel lining is composed of brick and concrete and is in good condition. Utilities within the tunnel at the time of inspection include water, steam, electric, and telephone; none of which were functioning. Minor problems at this time include corrosion of the water pipes and lighting conduits and downed electrical lines.

**RECOMMENDATIONS****Critical Repairs:**

None.

**Priority Repairs:**

None.

**Routine Repairs:**

1. Replace lighting conduit and wiring, 300 LF.

**FIELD INSPECTION REPORT****STRUCTURE NO. 74-75****INSPECTION DATE: 12/14/05**

<b>CONDITION RATING CODES</b>			
N	NOT APPLICABLE	2	CRITICAL CONDITION – advanced deterioration of primary structural elements. Failure cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the structure until corrective action can be taken.
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<b>59. TUNNEL</b>	<b>7</b>
1. LINING	G
2. PORTALS	G
3. FLOOR	G
4. DRAINS & DRAINAGE	G
5. VENTILATION	G
6. OTHER	N
7. OTHER	N
8. OTHER	N

402.2	Minor corrosion of water pipes.
402.3	Lighting conduits have minor to moderate corrosion and are hanging and laying on floor in areas.

<b>401. ACCESS ROOM</b>	<b>N</b>
1. WALL	N
2. CEILING	N
3. FLOOR	N
4. STAIRWAY	N
5. OTHER	N
6. OTHER	N
7. OTHER	N

<b>402. UTILITIES</b>	<b>4</b>
1. STEAM	G
2. WATER	F
3. ELECTRICAL	P
4. GAS	N
5. FIBER OPTIC	N
6. TELEPHONE	G
7. OTHER	N
8. OTHER	N

**PHOTOS**



Photo 1: North portal



Photo 2: South portal



Photo 3: Looking south toward Building 74; Note corrosion on pipes



Photo 4: Looking north toward Building 75; Note corrosion on pipes





Photo 5: Looking north toward Building 75; Note corrosion on pipes



Photo 6: General view of doorway at Building 75



Photo 7: General view of stairway at Building 74



Photo 8: General view of brick lining





Photo 9: General view of brick lining at south portal



Photo 10: Looking south toward Building 74; Note downed lighting conduit and reduced vertical clearance due to pipes



Photo 11: Downed light and conduit



Photo 12: Damaged light fixture